



On The Fringe

Journal of the Native Plant Society of Northeastern Ohio

Letter from the President about the urgent need to help ONAPA

Guy Denny, formerly chief of Ohio's Division of Natural Areas and Preserves (DNAP), was the guest speaker at our 2012 Annual Meeting. He expressed concern about the status and care of natural areas since the funding for DNAP has been eliminated due to drastic budget cuts. The following letter from Guy describes the changes in more detail. However, it is now up to volunteers, like us, to help manage these properties. The Native Plant Society of Northeastern Ohio has adopted Gott Fen Preserve, located in Streetsboro, Ohio. We have a program there in October to control invasives (Gott Fen Stewardship Day), and I hope we can count on you to join us in fighting the invasives that are now threatening the preserve. More details for the program will be communicated later in the year.

Guy also spoke about the recently-formed Ohio Natural Areas & Preserves Association (ONAPA). ONAPA is dedicated to promoting, protecting and improving Ohio natural areas and preserves for educational, charitable and scientific purposes. It was created in response to the changes in the DNAP and the support that is needed from the volunteer community to help preserve these natural areas. Any contribution you chose to make will help in this endeavor. Please go to www.ONAPA.org for more information.

I hope we can count on you. I know you understand the gravity of this unfortunate turn of events. The responsibility now lies on the shoulders of each and every one of us—I know I will be there fighting those invasives—I hope you will be by my side.

Kathryn Hanratty, President

January 7, 2013

To the Membership of the Native Plant Society of Northeastern Ohio,

The need has never been greater for volunteers from the conservation community to step up to help keep our state nature preserves managed in a sustainable manner. Over the last decade or two, with a seriously declining state economy, general revenue tax funding for ODNR has been drastically declining. Consequently, in 2009, ODNR Director Sean Logan, faced with severe budget cuts to ODNR's operating budget, made the decision to dismantle the Division of Natural Areas & Preserves (DNAP) as a cost saving measure. The Scenic Rivers Program was transferred to the Division of Watercraft, the Natural Heritage Program with its botanists and ecologists was transferred to the Division of Wildlife, and the remaining nine preserve managers were transferred to the Division of Parks & Recreation.

The former DNAP preserve managers still have the title of "preserve manager", but are now state park employees responsible for not only taking care of the nature preserves, but also responsible for being state park rangers and, in some cases, state park district maintenance personnel. They report directly to and are supervised by each of the state park district managers out of whose district they are now based and work. Since there is no longer a natural areas council in place, a monitoring & research section, or any other DNAP centralized supervisory staff with expertise in field biology to oversee the manager's activities and to provide technical biological/ecological expertise and guidance, the overburdened "preserve managers" are now pretty much on their own to get the job done the best they can, seeking whenever help they can from their colleagues and volunteers. Unlike their predecessors, such as former preserve managers Emliss Ricks and Bill Hudson, who were trained and experienced field naturalists, that is largely no longer the case. Even so, historically, preserve managers could always rely on a knowledgeable and experienced central office team to provide oversight for making wise natural areas management decisions and for working directly with them on habitat management and monitoring projects in the field.

Board

President	Kathy Hanratty
Vice President	Judy Barnhart
Treasurer	Bill Oberdick
Secretary	Jean Loria
At Large	Diane Christensen
At Large	J Meiring Borchers
At Large	Jane McCullam

Standing Committee Chairs

Membership	Jane McCullam
Publicity	Diane Christensen
Journal	Diane Christensen
Co-editor	Bill Oberdick
Public Relations	Tracey Knierim

The Journal of the Native Plant Society of Northeastern Ohio is published 4 times a year at Novelty, Ohio. ISSN 8756-6087. Questions or comments are welcome and may be addressed to Diane B. Christensen, 8400 Top Rail Lane, Novelty, OH 44072; 440-666-4870, dbpolice@roadrunner.com; or Bill Oberdick, 2459 Charney Rd., University Hts., Ohio 44118, 216-371-3345, bandbober@wowway.com.

The Mission of the Native Plant Society of Northeastern Ohio is to promote the study, appreciation and conservation of the native plants and plant communities of Ohio.

Fortunately, Deputy Director Glen Cobb, who currently also serves as the chief of both the Division of Parks & Recreation and the Division of Natural Areas & Preserves, recently had Rick Gardener transferred from the Division of Wildlife to the Division of Parks & Recreation as Chief Botanist. Although Rick has no direct supervisory authority over them, he is able to provide his botanical expertise to the managers of state nature preserves. Now, however, while working under the direct supervision of a state park district supervisor who may be supportive but lacks expertise and experience in natural areas management, and while attempting to fulfill their state park duties in addition to their preserve management duties, it has become extremely difficult for these preserve managers to adequately complete essential habitat management and maintenance duties on the preserves in a timely manner. This is where numerous dedicated volunteers can play a major and essential role in the attainment of wise and sustainable management practices for our state nature preserves.

The challenges are greater now, especially from the threat of invasive species, than they have ever been during the history of DNAP. We don't have the luxury of time to address these problems. If very significant action isn't taken and taken very soon, it may be too late to save the ecological integrity of many of our very special state nature preserves, especially those in northern Ohio where many preserves are disjunct, living relicts of the Ice Age. Members of the Native Plant Society of Northeastern Ohio can help make a difference, but we have to step up now and in a big way if we are to prevent the irreversible degradation to our state nature preserve system. The Gott Fen Stewardship Day scheduled for next October 12th is a big step in that direction.

Guy L. Denny, President ONAPA.

Gott Fen State Nature Preserve

The Native Plant Society has adopted Gott Fen Nature Preserve to provide needed stewardship to protect the preserve from invasive species. Guy Denny spoke to us at our 2012 Annual meeting and although DNAP still exists it is non-funded and has no personnel. Of great concern is the status and care of natural areas—who will take care of what and to what degree. So we stepped up to the plate and, on a volunteer effort, we will take care of this preserve.

Gott Fen Nature Preserve is located in Streetsboro, Ohio. It is one of the finest boreal fens in the state; Gott Fen harbors more than 20 state-listed species including the largest population of showy lady's-slipper in the state. Other rarities include round-leaved sundew, grass-of-parnassus, shrubby cinquefoil and northern bayberry. The U.S. EPA's Ecologically Rich Areas Report has listed Gott Fen as one of the finest boreal fens in the State of Ohio. The headwaters of Tinker's Creek originate in the area, adding to the importance of protecting the site, as

the wetlands serve the vital function of filtering and providing a clean water source at its origin. Access is permitted required permit only.

A program has been scheduled on Saturday, Oct. 12 at 10:00 am to work at the site. At this work session we will cut European buckthorn under the direction of Rick Gardner, ODNr Botanist, and preserve manager Adam Wohlever. More information will be communicated for this important endeavor.

Program Schedule – Spring 2013

Saturday, March 30, 9:00 am - Holden Arboretum, Corning Visitor Center. Instructor Julie Dougherty's program "Early Risers" is a primer for the April 24th joint weekday walk (see immediately below). This indoor/outdoor program will focus on early spring wildflowers, their identification, folklore and other interesting stories. The program will start indoors and explore how best to identify wildflowers. During a casual walk through the Arboretum's wildflower garden, we will then identify common wildflowers frequently found in our forests. NPSNEO members are invited to attend this class. If you are interested in participating, please register with Vonna Vecchio: 440-602-3833 - Code NAT102a. NPSNEO members will receive a reduced fee of \$10. Walk is limited to 15 NPSNEO members. Please dress for the weather.

Saturday, May 18, 9:00 am - North Kingsville Sand Barrens, Ashtabula County. Jim Bissell, Curator of Botany at Cleveland Museum of Natural History, leads this joint trip with NEON as a follow-up to his talk on 30 years of change along the Lake Erie shoreline that was part of our 30th anniversary celebration. **Directions:** I-90 to Rt. 193 N/North Kingsville. Proceed to US Rt. 20 east to Poore Road. Travel north on Poore Road. The preserve is on the west side, just north of the railroad tracks. A sign is located at its entrance. Boots and long pants are recommended. Call Diane to register at 216-691-1929 (H) or 216-666-4870 (Cell).

Spring Weekly Wildflower Walks – Wednesdays at 6:30 pm

No registration is required for these walks. But if you are lost, will be late, or want to see if the walk will be cancelled or postponed, call Tracey Knierim 330-388-9279 after 5 pm.

April 17 – Eagle Creek – This will be our 3rd year visiting this preserve. It is virtually untouched by deer, and the wildflower selection changes weekly. This preserve never disappoints us! Join us to discover the diversity and abundance of wildflowers that this park has to offer. **Directions:** Take Rt 82 to Hiram. Continue east on Rt 305 to Nelson Twp. At the circle, take the first road to the right (Parkman Rd). At the split in the road, bear right on to Center Rd. At the first stop sign, turn left on to Hopkins Rd. The parking lot will be about a mile down the road on the right: 11027 Hopkins Rd., Garrettsville, OH 44231.

April 24, Holden Arboretum, Corning Visitor Center. Instructor Ann Rzepka's program "Late Bloomers" is considered part 2 of a series (see March 30th program). Participants do not need to attend both classes. During this outdoor program we will look to see what has changed with the wildflower scene in the wildflower garden. Emphasis will be placed on the plant communities that wildflowers call home, as well as on which plants are endangered and threatened. Identification and folklore will be highlighted, along with best propagation practices and seed dispersal methods. **Directions:** I-90 East to RT 306. Go south on Route 306 to the bottom of the hill. Turn left on Route 615. At the first traffic light, turn right on Kirtland-Chardon Road. Travel 3.6 miles to Sperry Road. Turn left on Sperry Road.

Travel 1.4 miles, then turn left on main drive to reach the Warren H. Corning Visitor Center: 9500 Sperry Road, Willoughby, OH 44094. The registration fee is waived for NPS members, but we will need to call Vonna Vecchio to register at 440-602-3833. Code NAT102b. This walk will be limited to 15 NPS members.

May 1 – Hells Hollow Wilderness Area. Joint program with Lake Metroparks. Search for Spring Ephemerals with Kathy Terrell. It is quite a hike down the steps and back up. Sturdy footwear is advised. **Directions:** Take I-90 to Vrooman Road and go south for ½ mile to Carter Road and turn left (east) for about 2 miles to Paine Road and turn left (north). Proceed north on Paine Road to Blair Road. Take Blair Road for about 1 mile to Ford Road, then turn right (east) for about 1 mile to Trask Road and turn right (south). Continue south on Trask to Brockway Road. Follow Brockway Road one mile to Leroy Center Road. Turn right, and the entrance to the park is on the right: 14437 Leroy Center Rd., Leroy Twp., OH 44086.

May 8 – Headwaters Park, Geauga Park District. Enjoy the diversity of colorful spring wildflowers, including twin leaf, in these mature woods that traverse along beautiful East Branch Reservoir. Discover fascinating folklore associated with wildflowers. Also, bring binoculars for a look at waterfowl on the reservoir. Joint program with Geauga Park District. **Directions:** take Rt. 322/ Mayfield Rd east through Geauga County to Rt 608 in Claridon Township. Continue east about 0.6 miles to parking area on south side of road: 13365 Old State Road, Huntsburg, OH 44021.

May 15 – Camp Spelman, Portage Park District. Joint program with Chris Craycroft and the Portage Park District. This new park is currently not open to the public. So we are fortunate to be able to explore the old boy scout camp's wetlands and woods for Spring wildflowers. **Directions:** At the intersection of Routes 43, 303, 306, and 14 in Streetsboro, go South on RT 43 to the first traffic light. Turn right onto Seasons Rd. Turn left onto Ferguson Rd. The camp will be on the left.

May 22 – Hemlock Creek Picnic Area, Bedford Reservation. This will also be our 3rd year for this walk. Every year we have found over 50 species of native wildflowers in the flood plain. The highlight of this trip is the White Virginia Bluebells. **Directions:** Take I-271 Exit at Broadway. Go west on Broadway. Veer to the left onto Union Street. Turn left on Egbert Rd. Turn right into Bedford Reservation on Gorge Parkway. Follow Gorge Pkwy. until it ends. Turn right onto Dunham Rd. Cross over the bridge and immediately turn right onto Button Road. Follow the Hemlock Creek driveway to the end: 14500 Button Road, Bedford, OH 44146.

May 29 – Kent & Triangle Bogs. This will be our 3rd year for this trip too. It's probably our most popular weekday wildflower walk. The Pitcher Plant flowers are amazing at this time of year. We will meet at and walk the Kent Bog first and then car pool to Triangle Bog. Be prepared for insects. **Directions:** Take Rt 43 south through Kent. Turn right onto Meloy Rd. The parking lot is about ¼ mile down the road on the left.

2013 Membership Renewal

If you have not already done so, please renew your membership today! Don't miss an issue of *On The Fringe* or the latest information on our programs and field trips. The electronic edition of *On The Fringe* has color pictures, hot links, and arrives as soon as it is published. There is no extra charge for this edition, but we need your email address. If you wish to receive the print edition, just add \$10 to your dues payment to defray printing and mailing costs.

2013 Ohio Botanical Symposium

Friday, April 5, 2013. The doors open at 8 am. Program starts at 9:15 am and concludes at 3:30 pm. At Villa Milano, 1630 Schrock Road, Columbus, OH, 43229 Fee: \$40 per person. Registration deadline: April 2, 2013.

Keynote Speaker

In 1963, the New York Botanical Garden Press first published Gleason & Cronquist's *Manual of Vascular Plants*, universally regarded as one of the most authoritative books on the region's flora. Major advances in botany since the Manual's last edition in 1991 have made a major revision of the Manual an obvious necessity. Under the energetic leadership of NYBG scientist Robert F. Naczi, this project is now underway. Dr. Naczi will speak about the Botanical Garden's lively history of plant exploration and will discuss his project's progress in updating the new flora for northeastern North America, including the identification, geographic distribution, frequency, ecology, and conservation of the wild plants of the region.

Robert F. Naczi, Ph.D., is Curator of North American Botany at The New York Botanical Garden. His area of expertise is floristics of eastern North America, systematics and ecology of Cyperaceae (sedges), and systematics and ecology of Sarraceniacae (carnivorous pitcher plants). He earned his doctorate from the University of Michigan.

For more information and registration, go to <http://cmnh.org/site/ResearchandCollections/Botany/BotSymp.aspx>



Ohio's Premier Spring Botanical Adventure

On May 3-5, 2013, twenty of Ohio's top botanists and naturalists will converge at Shawnee State Park and Forest to lead trips for Flora-Quest during "orchid season." The Cleveland Museum of Natural History (CMNH) dubs it, "the premier spring botanical adventure!"

Shawnee is only a morning's drive from any corner of the state, so it's well within range for a weekend escape. This 63,000 acre forest, known as "Ohio's Little Smokies," boasts of nine endangered, 16 threatened and 19 potentially threatened species of plants. It's also brimming with birds, butterflies, amphibians and other interesting wildlife. There's no need to leave the state for a spring nature fix when you could join us in Southern Ohio!

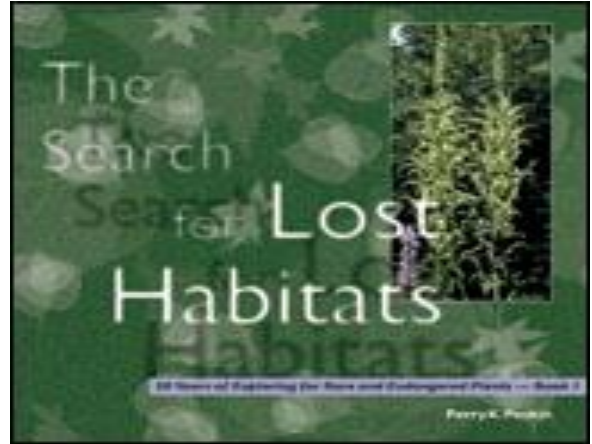
We have something for everybody's interests: botany, birds, trees, butterflies and so much more. See, touch, hear, smell—and new this year—*TASTE* the wilderness forest! See our complete quest listings at www.flora-quest.com.

Come for the botany and find a host of other like-minded outdoorsmen and women. But this isn't roughing it: we cater to your every need and drive you in our environmentally friendly and spacious vans. Small group-sizes ensure you'll have a hands-on experience. Flora-Quest is also a great way for Master Gardener Volunteers and Ohio Certified Volunteered Naturalists to expand their knowledge of Ohio's flora and fauna.

While we offer engaging educational programs, our keynote speaker is worth the trip alone! The author, Dr. Joan Maloof of the Old Growth Forest Network, will illuminate why we need undisturbed forests for study and play. She was a highly acclaimed speaker at the CMNH's Forest Conservation Symposium in 2012. If you missed her there, this is your opportunity to meet her in person. The well-known Ohio photographer Ian Adams will also return to Flora-Quest to help us celebrate trees.

Book Highlight:**The Search for Lost Habitats:
30 Years of Exploring for Rare and
Endangered Plants**

Orange Frazer Press
272 pages; 8 x 8.75 inches; paper
ISBN 1-933197-16-1
\$34.95



Perry Peskin was the first recipient of the Trillium award—an award given to him by the Native Plant Society of Northeastern Ohio in 2012 at our thirtieth-year Annual Meeting. Our Society created the award to honor those in the community who have made a “significant contribution” to the mission and goals of the Society. The Society’s mission is the study, appreciation, and conservation of the native plants and plant communities of Ohio.

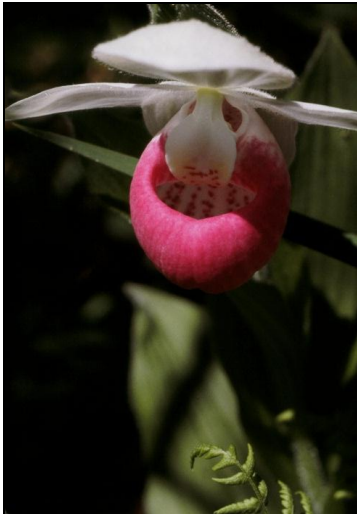
Perry Peskin exemplifies our mission in a special way. There are many who through their occupation do much to foster that mission, but Perry’s life shows that this mission can be pursued with dedication even by those who are not employed in the field of conservation, botany, or similar areas.

The *On The Fringe* Journal featured a review of his book, *The Search for Lost Habitats; 30 years of exploring for rare and endangered plants* in March 2007, Vol. 25, No. 1. We are including here a chapter of Perry’s book to give our readers a sample of his engaging writing and beautiful photographs. We hope you enjoy it!

The Editors

Chapter 10: Orchidophilia

By Perry Peskin



10-3 On the Bruce Peninsula of Ontario, jutting into Lake Huron, the pink coloration of many orchids is replaced by a deep red, such as illustrated by this **showy lady's slipper**.

Who doesn't like orchids? They're the Hollywood glamour queens of the plant kingdom. They wear bizarre outfits, crazy hairdos, colors that don't match. They're demure and exciting at the same time, full of little fun tricks like popping up in unexpected places (“I swear they weren't here last week!”) or displaying odd variations (“Hey, here's one that's all white with purple stripes!”).

Who can resist calypsos, three inches high and shaped like a miniature lavender slipper with a gold tongue? And the fringed orchids with their thick clusters of red-purple or white or tangerine flowers resembling ballerinas with fringed skirts? And the lady's-slippers, with their huge pouches of yellow or pink or white? It's exhilarating, almost intoxicating, to find huge stands of these floral wonders in Ohio, Michigan, the Carolinas, Ontario, and all the far-flung provinces of the Orchid Kingdom.

But orchids exert weird effects on people. Perhaps they emit plant hormones that affect our psyche. Just looking at an acre of orchids at the peak of bloom is enough to turn an ordinary plant hunter into an orchidophile for life. In fact, we can't just look at them. It isn't enough. Who'd ever believe us? Orchids make us take photos, many photos, photos that can be shown to appreciative members of garden clubs and senior-citizen groups and native-plant societies and all the other stay-at-homes who will envy us for The Best Arethusa Slide Ever. We may modestly mention that it took five hours of slogging through knee-deep bogs, loaded with poison sumac, swarming with mosquitoes and black flies, just to bring back this slide, and much of this is true.

Besides, who would ever actually pick an orchid, even to be pressed on a museum herbarium sheet, even for the cause of science? They're too rare. Most of them are endangered. And so we join the ranks of the Orchid Photographers, or OP's, with our reflex cameras, multiple lenses, flash attachments, and tripods.

Orchids made OP's act in predictable ways. It's easy to spot a group of them in the woods. They're the people standing patiently in line, as if waiting their turn at a nonexistent restroom. Around them hover the members of a higher orchidophile echelon, the Orchid Discoverers, or OD's. These are usually long-time natives of the area who have an encyclopedic knowledge of each species, its habitat requirements, and its time of bloom. OD's are like press agents: they know that some orchids are publicity-shy, act coy, put on camouflage. If an ordinary OP combs a hemlock grove for orchids and finds nothing, the OD will lead him back and point out a round-leaved orchid growing here, a spotted coral-root growing there, and a downy rattlesnake-plantain that might survive if the OP will only move his foot off it.

Orchids make us talk funny. When referring to the Bruce Peninsula of Ontario, which probably has more orchid species growing in greater profusion than any comparable area in Eastern North America, we say "the Bruce." Knowledgeable OP's will often be overheard, when choosing a headquarters for a Bruce foray, arguing



10-7 In Ohio the **pink lady's slipper** (*C. acaule*) shown here in close-up, is no longer considered rare, perhaps because it favors a variety of habitats besides wetlands, especially dry or wet woodlands.



10-10 The only hybrid orchid I've ever seen in the wild. Found in Mill Prairie, it is a hybrid between the **small yellow lady's slipper** (*C. parviflorum* var. *p.-E*), which I've never seen in Ohio, and the **small white lady's slipper** (*C. candidum*-E). It has the yellow "slipper," referring to the lower petal, or **labium**, of the former species, and the small size of the latter and is officially named *C. x andrewsii*, or **Andrews' lady-slipper**.



10-11 Fringed Orchids: The **yellow fringed orchid** (*Platanthera ciliaris*-T) is really a light orange in color. In Ohio it is found in wet sandy prairies west of Toledo as well as in the southeast portion of the state. (More about this elegant species in Chapter 15.)



10-15 **Northern Bog Orchids**: in June 1984 I returned to Titus Bog south of Erie, Pennsylvania, where I had first seen the **dragon's-mouth orchid** (*Arethusa bulbosa*-E), as described in the introduction. This time I took a camera and was able to take this photo of the orchid facing forward.

over the advantages of Red Bay over Tobermory (always “Tub-m’ry”). Many OP’s sound as if they speak in tongues: “Yes, Flowerpot Island was the place where I mistook *Corallorhiza maculata* var. *flavida* for *Corallorhiza trifida* var. *verna*.” Only among orchidophiles and lawyers is Latin a living language.

Orchids make many OP’s argumentative. Occasionally one can hear long, loud discussions that may come to blows. These are caused by disagreements over orchid nomenclature and taxonomy, precipitated by a hint from Case, a footnote in Luer, a sentence in Voss, or any of the various books by Orchid Authorities (OA’s). Aside from causing hard feelings, the biggest disadvantage of discussing taxonomy is that it keeps an OP away from the next promising orchid site. A beginner should realize that orchidophilia is a dawn-to-dusk affair with hardly any time off for meals. That is why McDonald’s is the restaurant of choice for the average group of OP’s. They are already conditioned to getting up at the crack of dawn and waiting in lines.

All members of the orchid family exert the same fascination. If we admire the Hollywood glamour goddesses, we also have to like their poor relatives, those that take character roles, bit parts, walk-ons. It’s as if we have forgotten an obvious truth, one that OA’s never mention: most orchids are little and homely. A great many of them are a few inches high and are colored green, brown, or dirty white. If they were reclassified as members of the chickweed or smartweed families, no one would look at them twice. Although the life histories of these obscure species are probably fascinating (for instance, many of the twayblades look like little green moths on a stem), the average OP doesn’t bother with such details. The fact that they’re orchids is enough.



10-16 At Oliphant Fen in the southern part of the Bruce Peninsula, in Ontario, bog orchids are abundant, such as the **rose pogonia** (*Pogoniaophioglossoides-7*). In Ohio this species is found in Willow Bog, along with the dragon’s-mouth and the grass-pink. Unfortunately, all three do not bloom at the same time.



10-17 The **grass-pink** (*Calopogon tuberosus-7*), seen from a distance in Oliphant Fen, is equally rare in Ohio. This photo shows petals of a deeper pink than are seen in Ohio.

By the same token, orchids make us ignore attractive or rare plants that grow in the same habitat but don’t happen to belong to the orchid family. (An exception might be made for carnivorous plants and moonwort ferns.) In the South, so I’ve heard, trilliums take on this role. The trillium photographers, in their search for all twenty-three species of sessile trilliums, most of which will never win beauty prizes, ignore many rare and intriguing plants growing in the same habitats.

Certainly the most unhappy orchidophiles are the OA’s. They are the popularizers, the ones who Write Books and Give Lectures. They ought to be happy, for they actually make a living at what the rest of us peasants do at great expense. But should a group of OP’s meet an OA in the field, he has a pained look as if he’s thinking, “My God, what have I done?” You tell one you were among the audience who admired his lecture in Pittsburgh, and he’ll say, “Lord, what a mob!” You tell another that this group came all the way from Tennessee to visit a particular orchid site, and he’ll say, “The visitors are ruining this place. We’re going to have to close it off for the next three years.”

In a sense he’s partly right: orchids make OP’s forget about the environment. They also begin to ignore the scenery, the human history, the ecology, and the animal inhabitants of a choice orchid habitat. A gorgeous Blackburnian warbler can be singing a few feet above the heads of a group of OP’s waiting in line, and no one will even bother to look up.



10-18 This close-up of the **grass-pink** gives some idea of the bizarre way this species is pollinated. The uppermost petal with a sort of pollen brush attached is really the **lip petal**, which in most orchids is the lowermost petal. (While in the bud the whole flower is turned 180 degrees.) When a bee comes looking nectar, the weight of the insect causes the brush to fall down on its back and covers it with pollen. Now the bee is able to pollinate another grass-pink, and the procedure is repeated.



Orchidophilia can sometimes reach the dangerous stage of orchidomania. At this point, the OP starts concentrating on strange color variations, hybrids, and albinos and forgets everything else. If he starts publishing, watch out! He's about ready to join the OA's. Right now the "splitters" are in the ascendancy. They are upgrading color forms into new subspecies, subspecies into new species, groups of species into new genera. If they are thorough enough, they will get their own name appended to the new scientific name and become immortal—that is, until a new generation of OA's, this time the "lumpers," get their chance and restore the orchid family to its former status.

The reverse side of orchidomania is orchidophobia. At times one hears about severe withdrawal symptoms. In an extreme case, an OP was heard to say, by at least two witnesses, "Ram's-head lady's-slippers are a nothing plant, and albino ram's-heads are nothing squared!" When they finally got him to a doctor, he was taken off orchids and put on sedges, which can't be photographed satisfactorily and produce no known side effects. With no more waiting in line, his work day went from fourteen hours down to eight, and he could wake up at a civilized time and eat in sit-down restaurants. While his comrades were stalking orchids elsewhere in Michigan, he began to savor what he termed "the wholeness of life." He visited Mio to see the Kirtland warblers and Mackinaw City for the restored fort of Michilimackinac. He explored the Porcupine Mountains, Sleeping Bear Dunes, and the Pictured Rocks. He spent three days at Isle Royale looking for moose. With the pressure to produce taken off, he learned to relax and enjoy the world without peering through a camera lens. Orchid taxonomy became so much Greek to him, and he reverted to speaking English.

Nowadays, according to rumor, he occasionally sneaks out to take a quicky orchid photo and has definitely been known to give slide shows to garden clubs. He has even been heard to say that ram's-heads are "curious" and "not all that bad." When asked whether he will ever become an orchidophile again, he smiles enigmatically and says: "I see the orchid family socially, but we are just good friends."

10-22 **A Miscellany of Homely and Inconspicuous Orchids:** A large-flowered orchid, often overlooked because of its green petals, the **whorled pogonia** (*Isotria verticillata*) can be found on shady, rocky, forested slopes, as are commonly seen in the Cuyahoga Valley National Park south of Cleveland, Ohio. Its cousin with short, dirty-white petals, the **small whorled pogonia** (*I. medeoloides-E*) is the rarest orchid east of the Mississippi and was not found in Ohio until the 1990's.

Retired from teaching for 23 years, Perry still makes his home in the Cleveland area. He and his wife Carolyn have gone on many eco-tours throughout North and parts of South America, as well as England and France, observing habitats as varied as the Arctic tundra, the deserts of the Southwest, and the tropical rain forests. Perry has been a member of the Native Plant Society 30 years.

Folklore:

Natural History of Maple Syrup

By Stephen G. Saupe

According to an Anishinabe legend, the Great Spirit made life easy by providing abundant game and crops, and even filling a maple tree with a thick sweet syrup which could be drunk by simply breaking off a branch and allowing it to drip into your mouth. Manabohzo was concerned that the people were spending too much time drinking syrup, so he collected some water from the river in a birch basket and poured it into the tops of the trees to thin out the syrup. He also decreed that the trees would only flow for a short time in the spring.

There are many truths in this tale. First, we learn that maple syrup is an ancient crop; in fact, it is one of the relatively few uniquely North American crops. The legend also rightfully attributes the discovery of syrup-making to the Native Americans and emphasizes that maple sap is dilute (about 2 percent sugar) and flows in the springtime when the day and night temperatures fluctuate above and below freezing, respectively.

The mechanism by which sap flows from a maple is not fully understood, but is related to temperature. During the cool night, gases contract in the stem. This reduces the pressure, sucking water from the roots. The water freezes inside hollow fiber cells, trapping gases in ice bubbles. The following day, as the temperature warms, the ice melts and the gases expand, which along with the gravitational pull of water in the stem, provides the pressure that pushes sap out of the taphole.

One flaw with this physical

explanation for sap flow is that sucrose in the vessel sap shouldn't be required for sap flow—but it is! Recent research suggests that fibers, which surround the vessels, act like a membrane to allow for osmotic uptake of water and the concomitant development of pressure that further contributes to the stem pressures forcing sap out of the tree. Stay tuned for more advances in our understanding of sap flow physiology.

To make syrup, a hole ($7/16^{\text{th}}$ —inch or preferably $5/16^{\text{th}}$ —inch) is drilled about two inches into the sap wood. Maples (*Acer*), including *A. saccharum*, *A. nigrum*, *A. negundo*, *A. saccharinum*, and *A. ginnala*, are among the few trees that produce sap in the spring. Apparently this is due to their perfect combination of air-filled fibers and fluid-filled vessels. Once tapped, a spile is inserted in the hole and a bucket, bag, or vacuum tube is attached to collect the sap. The dilute sap must then be concentrated into syrup.

The Native Americans originally dropped hot rocks into hollowed logs containing sap. Allowing sap to freeze and then removing the ice was likely also used, since when the water freezes it leaves behind a more concentrated sugar solution. These techniques gave way to boiling sap in batches in metal kettles or flatbottom pans, and ultimately to the continuous-flow evaporators now in use by larger operations. Because cooking sap is so energy-intensive, various improvements, including blowers in the fire chamber, sap preheaters, and reverse osmosis, have evolved to conserve fuel and save time.

To determine when the syrup is ready to bottle, producers measure its density with a hydrometer, or sugar concentration with a refractometer. The temperature of the boiling syrup can also be used, since finished syrup boils at 7 degrees F above the boiling point of water. If the syrup is cooked too long, it tends to crystallize, but if it's not cooked long enough, then it may develop mold in storage. The syrup must be filtered before it is bottled, because during cooking a precipitate called sugar sand, or nitre, forms. This material is the result of the interaction of various trace components of the sap and is largely comprised of calcium salts, including calcium malate.

As the Native Americans have long known, maple sap is relatively dilute, approximately 2 percent sugar, whereas finished syrup is 66 percent. The Rule of 86 expresses the relationship of sugar concentration between maple syrup and sap. To determine how much sap is required to make a gallon of syrup, divide 86 by the sugar concentration of the sap.

Thus, it will take 43 gallons of sap with 2 percent sugar ($= 86 / 2$) to make a gallon of syrup. Or in other words, a producer must boil off 42 gallons of water to produce one gallon of syrup. This is the source of the commonly cited statistic that it takes approximately 40 gallons of sap to make one gallon of syrup. Although most maple sap is now used to make syrup, the Native Americans and early settlers continued cooking the syrup to produce maple sugar because it was easier to transport and store.



Photo courtesy of Wikipedia, the free encyclopedia. January, 2013.

The syrup grading system is currently in flux but will soon include four main grades available for sale to consumers: Golden, Amber, Dark, and Very Dark. They differ in color and flavor; a consumer should taste the various grades to see which he/she prefers. The quality of the syrup is a function of any microbial contamination of the sap before it was cooked, the biochemical constituents of the sap, and the length of time the sap was cooked.

No matter which grade of syrup you prefer, Robert Boyle was certainly correct when he wrote in 1663, the “juice that weeps out its incision, if it be permitted slowly to exhale away the excess moisture, doth congeal into a sweet and saccharine substance.”

Stephen G. Saupe, Biology Department, College of St. Benedict/ St. John’s University, and a board member of the Maryland Native Plant Society. This is a summary of his March 1, 2012, presentation for the Society.

Photos in this article were added by *OTF* editors.

Society of Ethnobiology

The Society of Ethnobiology (SoE) is a nonprofit professional organization established in 1977 to promote and perpetuate the interdisciplinary study of the relationships of plants and animals with human cultures worldwide, including past and present relationships between peoples and the environment. The Society integrates scientific research with education and with public priorities at regional, national, and international levels. The mission of the Organization is to promote the understanding of the past and present relationships between humans and their biological worlds.

Ethnobiology has a unique perspective on the inextricable links between society and nature. Ethnobiologists transcend conventional disciplines and intermingle diverse knowledges and practices. They strengthen the commitment to researching and educating people about ethnobiology in this era when the integrity and resiliency of our biological and cultural worlds is threatened. To learn more about the study of ethnobiology go to <https://ethnobiology.org/sites/all/modules/civicrm/extern/url.php?u=184&qid=14390>.

Mile-A-Minute Weed
***Persicaria perfoliata* L.**
Buckwheat family (Polygonaceae)

Native Range

India to Eastern Asia, China and the Islands from Japan to the Philippines, including Nepal, Burma, Manchuria, China, Korea, Taiwan and the Malay Peninsula.

Description

Mile-a-minute weed, or Asiatic tearthumb, is an herbaceous, annual, trailing vine. Stems are armed with recurved barbs which are also present on the underside of the leaf blades. The light-green-colored leaves are shaped like an equilateral (equal-sided) triangle and alternate along the narrow, delicate stems. Distinctive circular, cup-shaped leafy structures, called ocreae, surround the stem at nodes, thus the name 'perfoliata.' Flower buds, and later flowers and fruits, emerge from within the ocreae. Flowers are small, white and generally inconspicuous. The fruits are attractive, deep blue and arranged in clusters at terminals. Each berry-like fruit contains a single glossy, black or reddish-black hard seed called an achene. The scientific name was recently changed from *Polygonum perfoliatum* as a result of extensive taxonomic research on the genus.

Ecological Threat

Mile-a-minute weed grows rapidly, scrambling over shrubs and other vegetation, blocking the foliage of covered plants from available light, and reducing their ability to photosynthesize, which stresses and weakens them. In addition, the weight and pressure of the vine causes distortion of stems and branches of covered plants. If left unchecked, reduced photosynthesis can kill a plant. Large infestations of mile-a-minute weed eventually reduce native plant species in natural areas. Small populations of extremely rare plants may be eliminated entirely. Because it can smother tree seedlings, mile-a-minute weed has a negative effect on Christmas tree farms, forestry operations on pine plantations and reforestation of natural areas. It has the potential to be a problem to nursery and horticulture crops that are not regularly tilled as a cultivation practice.

**Distribution in the United States**

Mile-a-minute has been found in parts of Connecticut, Delaware, Massachusetts, Maryland, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Virginia, West Virginia, and Washington, DC. This area comprises an estimated 20 percent of its likely potential range. It is considered to be a temperate species with subtropical tendencies and therefore has the potential to invade those portions of the contiguous United States that have the appropriate climate to provide a minimal eight week cold vernalization period. A temperature of 10°C or below must be sustained for an eight week period to stimulate germination. It has also been reported to be invasive in nine national parks in four Mid-Atlantic States.

Habitat in the United States

Mile-a-minute weed generally colonizes open and disturbed areas, along the edges of woods, wetlands, stream banks, and roadsides, and uncultivated open fields, resulting from both natural and human causes. Natural areas such as stream banks, parks, open space, road shoulders, forest edges and fence lines are all typical areas to find mile-a-minute. It also occurs in environments that are extremely wet with poor soil structure. Available light and soil moisture are both integral to the successful colonization of this species. It will tolerate shade for a part of the day but does best in full sunlight. The ability of mile-a-minute to attach to other plants with its recurved barbs and

climb over the plants to reach an area of high light intensity is a key to its survival. It can survive in areas with relatively low soil moisture, but demonstrates a preference for high soil moisture.

Background

The first records of mile-a-minute in North America are from Portland, Oregon (1890) and Beltsville, Maryland (1937). Both of these sites were eliminated or did not establish permanent populations of the species. However, the introduction of mile-a-minute in the late 1930's to a nursery site in York County, Pennsylvania did produce a successful population of this plant. The plant first appeared at this site when holly seeds from Japan were planted and mile-a-minute came up with the holly. The owner of the nursery was interested in the plant and allowed it to reproduce; unfortunately, subsequent efforts to eradicate it were not successful. The distribution of mile-a-minute has radiated from the York County site into neighboring states. In the past 70 years, the range for this plant in the United States has expanded more than 300 miles from its original York County, Pennsylvania site.



Biology & Spread

Mile-a-minute weed is primarily a self-pollinating plant (supported by its inconspicuous, closed flowers and lack of a detectable scent), with occasional out-crossing. Fruits and viable seeds are produced without assistance from pollinators. Vines generally die with the first frost. Mile-a-minute is a prolific seeder, producing many seeds on a single plant over a long season, from June until October in Virginia, and a slightly shorter season in more northern geographic areas. Seed persists in the soil for as long as 6 years, with staggered germination over the years.

Birds are probably the primary long-distance dispersal agents of mile-a-minute weed. Transport along powerlines and other utility rights-of-way can provide an important dispersal corridor for mile-a-minute. Transport of seeds short distances by at least one ant species has been observed and may play a role in the survival and germination of mile-a-minute seeds but further investigation is needed. The tips of the seeds bear an elaiosome (nutritious food body) which may be attractive to the ants. Local bird populations are important for dispersal under utility lines, bird feeders, fence lines and other

perching locations. Other animals observed eating mile-a-minute weed fruits are chipmunks, squirrels and deer, and viable seeds have been found in deer scat.

Water is an important mode of dispersal for mile-a-minute weed. Its fruits can remain buoyant for 7-9 days giving it the ability to disperse long distances in stream and river environments. Where long vines hang over waterways, fruits that detach are easily carried away in the water current. Storm events increase the likelihood of spread by seed throughout watersheds.

Management Options

A variety of control measures can be used for management of mile-a-minute weed depending on the level of infestation and resources available. Remember that even if all plants are removed, efforts must continue for several years to exhaust any remaining seed bank. For biological, chemical, cultural, manual and mechanical removal please visit www.nps.gov/plants/alien/fact.htm.

From the website of the Plant Conservation Alliance's Alien Plant Working Group. Weeds Gone Wild: Alien plant invaders of Natural Areas. Fact sheet: Mile-A-Minute weed. www.nps.gov/plants/alien (downloaded 1/05/2013).

Authors: Judith A. Gerlach Okay, Maryland Department of Natural Resources, Annapolis MD; Judith Hough-Goldstein, University of Delaware, Newark, DE; and Jil Swearingen, National Park Service, Center for Urban Ecology, Washington, DC.

Photographs by Jil M. Swearingen, National Park Service, Center for Urban Ecology, Washington, DC, and Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.



Interesting Factoid:

Jeffersonia diphylla (L.) Pers., Twinleaf

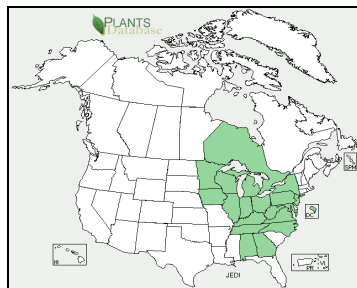
Description: Hardy, North American perennial; small white flowers resembling those of bloodroot appear on stems in early spring before the leaves expand; unusual lidded seedpods mature in early summer; plants often go completely dormant in summer.

Size: Grows to 10 inches high and 12 inches wide.

Cultural Information: Prefers shade and woodsy, moderately moist soils.

USDA Zones: 6 through 8.

Historical Notes: This rare and desirable native woodland perennial was named to honor Thomas Jefferson in 1792 by the "Father of American Botany," Benjamin Smith Barton. Jefferson grew the plant at Monticello in one of the oval flowerbeds in 1807. The attractive flowers last only a few days, often appearing about the time of Jefferson's April 13th birthday. Twinleaf is well worth growing for its lush green foliage, which makes a beautiful groundcover for a shaded site. It is easy to grow, but is very slow to propagate and takes 5 to 8 years to bloom from seed.



Taken from *The Jefferson Encyclopedia*. <http://www.monticello.org/site/research-and-collections/tje>, February, 2013.

Photo and map taken from profile of *Jeffersonia diphylla* (**twinleaf**) in the USDA PLANTS database.

Fern in Focus: Royal Fern

Osmunda regalis L. var. *spectabilis* Willd. A. Gray

The Royal Fern Family (*Osmundaceae*)

By Melanie Choukas-Bradley

When I call to mind the Royal Fern, I picture a rustic road bordered on one side by a racing woodland creek and on the other by a lush seepage swamp. In the swamp, cinnamon ferns lift their gracefully curved fronds toward the fragrant overhanging boughs of fringe-tree and the wild azalea known as pinxter flower. In their midst are slender, late-blooming Jack-in-the-pulpits. Along the dirt road, at the edge of the cinnamon ferns, small white Canada Mayflowers—also called wild lily-of-the-valley—carpet the ground beneath branchlets of arrowwood *Viburnum*. In the center of it all, as if holding court, are the tall and spreading Royal Ferns.

Although Tina Thieme Brown and I call this ethereal landscape the "fairy land," it is a very real place on the lower western slopes of Sugarloaf Mountain along the pristine creek called Bear Branch. One of the many things we plant people seem to have in common is the indelible memory we carry of the first place where we have seen and identified a beloved plant. This is my Royal Fern place.

*Royal Fern is an interesting plant
... especially when it grows in clusters,
it doesn't look fern-like when you glance at it.
It looks more shrub-like.*

Thoreau described ferns as "tender and delicate, but perfect in all their details, far more than any lace work—the most elaborate leaf we have." With feathered fronds of tender green and spores as light as fairy dust, ferns have inspired mystics, romantics and poets throughout time, in the Old World and the New. Their ancient lineage seems to add to their mythic appeal. According to a University of Massachusetts biology website: "The Royal Fern is one of the most widespread of all living species and is found on every continent except Australia [and Antarctica]. *Osmundas* have witnessed the rise of the reptiles, the flourishing and eventual extinction of the dinosaurs, the origin and adaptive radiation of the mammals, and the rise to dominance of an obscure genus of hominids named *Homo*." Yet when aesthetic appreciation turns to ID attempt, romance can quickly fade, with serious fern frustration setting in. That is why we, as a native plant society, are vowing to learn more about the native ferns of Maryland during 2011 as a collective project, with some of the botanists among us who really know the ferns sharing their expertise during MNPS monthly meetings and field trips. It is also why Tina and I have chosen a species that is among the more easily identifiable for *Fern in Focus*, a feature usually devoted to wildflowers.

To begin with, the Royal Fern doesn't look like a typical fern. In the words of naturalist Dwight Johnson, who will address our April monthly meeting and lead a Gunpowder Falls field trip in June: "Royal Fern is an interesting plant because, especially when it grows in clusters, it doesn't look fern-like when you glance at it. It looks more shrub-like." MNPS board member, teacher and author, Cris Fleming, who will lead us on a fern walk at Snyders Landing in May, says: "It is easy to identify for those of us who know it is a fern, but I have had people on walks, who, seeing it without the fertile frond, think it is some kind of shrub. The 2005 *Peterson Field Guide to Ferns* says 'it resembles a locust' and indeed it does!" When the fertile frond is present, it's easy to understand a more obscure common name for this fern: flowering fern. Tina's art depicts the floral appearance of the Royal Fern's fertile pinnae.

Fronds: Royal Fern fronds may be three feet or more in length and during the growing season they are a fresh pale

green, looking like black locust leaves. Fronds are bipinnately divided with suboppositely arranged, widely spaced and ascending *pinnae*, and alternate, nearly entire or just barely toothed *pinnules*. The pinnules are oblong (like black locust leaflets) with blunt apices and rounded or slightly oblique bases. They are very short-stalked, almost sessile. The fertile (sporangia-bearing) pinnae grow from the tops of some of the fronds. They are green at first, turning brown, and they appear tightly clustered and panicle-like. Spores are produced in spring and early summer. The *Peterson Field Guides to Ferns* notes: "'Royal Fern' easily remembered by 'crown' of fertile pinnae at top of fertile fronds." Resorting to a contemporary image, the Peterson authors write of the *Osmunda* genus: "The sporangium opens through a long slit on the top, looking like Pac-Man on the attack." (Special thanks to Cris Fleming for bringing the Peterson descriptions to my attention!)

Rachis: Slender and round; pinkish, golden or green.

Stipe: Smooth and 8-24 inches long; pinkish, reddened at the base and slightly winged.

Rhizome: Massive, somewhat erect and partially above ground; old stipe bases woven together.

Height and Growth Habit: Approximately 3-6 feet. Grows in clusters.

Habitat and Range: Swamps, bogs, stream sides and oilier moist, often acidic soils; eastern U.S. and Canada, and on every continent but Australia and Antarctica.

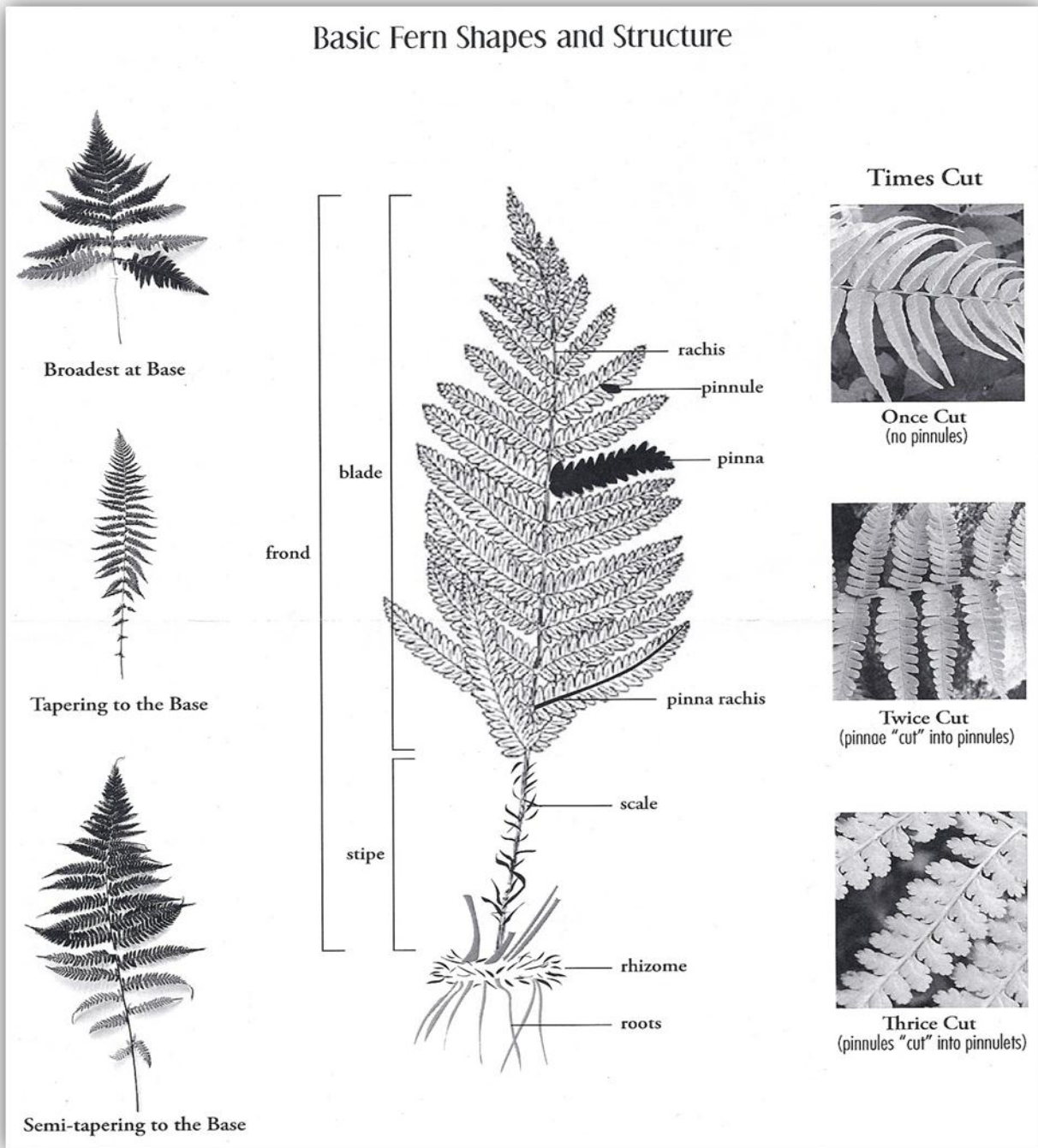
Similar Species and an Exciting MNPS Discovery: The Royal Fern is not apt to be confused with other fern species but it often grows in concert with Cinnamon Fern. According to Wes Knapp: "*Osmunda regalis* (Royal Fern) and *O. claytoniana* (Interrupted Fern) are the only two remaining *Osmunda* species in our area. Recent work shows that the Cinnamon Fern is in a different and monotypic genus, *Osmundastrum*, and its preferred name is now *Osmundastrum cinnamomeum*. This isn't a new name but a very old one that is being revived." The Cinnamon Fern remains in the family *Osmundaceae* with the Royal and Interrupted ferns.

Some team work on the part of the Maryland Native Plant Society resulted in an exciting discovery two years ago. MNPS president Kirsten Johnson tells

the story: "In the spring of 2009, the Baltimore Chapter's Bill Morgante organized a trip to a magnolia bog in the Laurel area. Leader Rod Simmons spotted an unusual looking fern next to a stream. Ginny Yacovissi suggested it might be *Osmunda x ruggii*, a rare hybrid of Interrupted and Royal Ferns. The next day, my husband Dwight Johnson and I returned to the area and

carefully collected a frond, which we preserved and presented to the Smithsonian herbarium on behalf of MNPS. Fern experts at the National Science Foundation and the Smithsonian have confirmed that this is indeed *Osmunda x ruggii* R. Tryon (*O. claytoniana* x *O. regalis*)." This is quite a frond in the cap for the Maryland Native Plant Society!

Reprinted from *Miralandica*, a publication of the Maryland Native Plant Society, Spring 2011, Vol. 2, Issue 1.



Key to the Common Ferns of Maryland

Prepared by Dwight Johnson, 2011

Broadest at Base

- Once cut with wavy pinnae Sensitive Fern
- Twice cut with wiry stipe Broad Beech Fern
- Thrice cut
 - i. Large, coarse; usually more than one plant in area; not lacy Bracken Fern
 - ii. Small and growing singly or in a small group; delicate and lacy
- Fertile stalk arising from center of frond; stipe pink towards base Rattlesnake Fern
- Fertile stalk at or under the ground; stipe green Cut-leaved Grape Fern

II. Fully Tapering to the Base

- Once cut** - Small-medium size; very narrow frond; pinnae oblong with "boot" similar to Christmas fern; stipe smooth and dark Ebony Spleenwort

Twice cut

- Large and growing in a definite crown; fertile frond (if present) in center, found more often in gardens Ostrich Fern
- ii. Medium size, and growing zig-zag over an area, not in crowns New York Fern

III. Semi-tapering to the Base

Once cut

- Pinnae two inches or less
- Boot-shaped pinnae attached by a short stalk; Christmas Fern
- Pinnae with no stalk; usually growing on top of rocks Common Polypody
 - ii. Pinnae over two inches long, wavy (resembles Sensitive Fern), found in moist areas Netted Chain Fern

Twice Cut

- i. Stipe with brown scales; sori on edge of pinnule Marginal Wood Fern
- ii. Stipe smooth or slightly hairy
- Large size; woolly tufts at bases (axes) of pinnae Cinnamon Fern
- No tufts at axes
 - 1. Large size; some pinnae apparently missing from middle of fertile fronds (if present); veins in pinnule forked Interrupted Fern
 - 2. Sori and pinnule venation in herringbone pattern; 2 lowest pinnae pointing outward in a V shape Silvery Glade Fern
 - 3. Growing zigzag in patches near wet areas Marsh Fern
 - iii. Large and shrubby; leaf-like pinnules with short stems Royal Fern

Thrice Cut

- Stipe with brown scales at base
- On lowest pinna, the pinnule closest to the stipe is the longest Spinulose Wood Fern
- On lowest pinna, second pinnule from the stipe is the longest Intermediate Wood Fern
 - ii. Stipe smooth
- Growing in a clump; sori slightly curved and in herringbone pattern; rachis smooth, not hairy Lady Fern
- Growing zig-zag over area; hairy rachis; sori small and round Hayscented Fern
- Pinnules lobed (leaf-like); stipe long and slender Fragile Fern
 - iii. Stipe and rachis hairy, pinnules lobed; lower pinnules rounded, small fern found growing in rocks Blunt-lobed Woodsia

IV. Unique Shaped Fern

- Circular-shaped fronds with pinnae on outer rim of stalk; dark wiry stipe Maidenhair Fern



Hayscented Fern, *Dennstaedtia punctiloba*, is very common in Maryland woods. Because it is not consumed by deer, it has spread invasively in some northeastern forests to the detriment of other understory plants.



Common Polypody, *Polypodium virginianum*. In the piedmont, this fern is most often found on rocks, but in the coastal plain it is also seen in clumps next to trees. Notice that the pinnae have no stalks.



The common name of Interrupted Fern, *Osmunda claytoniana*, describes its fertile fronds, which are "interrupted" by several pairs of fertile pinnae.



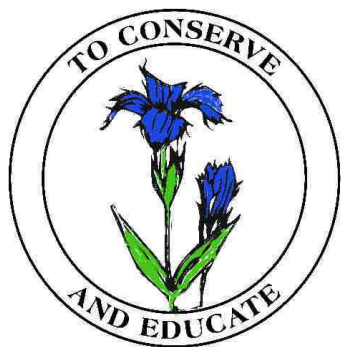
Walking Fern, *Asplenium rhizophyllum*, creeps across calcareous rocks.



Ebony Spleenwort, *Asplenium platyneuron*, can be confused with Christmas Fern, *Polystichum acrostichoides*, because both have "boot" shaped pinnae. But look for Ebony Spleenwort's narrow frond and smooth black stipe, very different from the scruffy stipe of Christmas Fern.



Silvery Glade Fern, *Deparia acrostichoides*, has herring-bone shaped sori, similar to those of its close relative, Lady Fern, *Athyrium filix-femina*.



Chapters of the Ohio Native Plant Society

Cincinnati Wildflower Preservation Society
Christine Hadley, President
445 Ward-Koebel Road
Oregonia, OH 45054
513-850-9585
cncywildflower.org
<http://www.CincyWildflower.org>

The Mohican Native Plant Society
Joanne Wrasse
1633 St.Rt.603
Ashland OH 44805
419-281-3690
jwrasse@zoominternet.net

The Native Plant Society of Northeastern Ohio
Kathy Hanratty, President
9059 Auburn Road
Chardon OH 44024
(440) 279-0890 (work)
oldefarm@windstream.net
<http://www.NativePlantSocietyNEOhio.org>

The Botanizers
The Wilderness Center
Gordon T. Maupin
P.O. Box 202
9877 Alabama Ave. SW
Wilmot, OH 44689-0202
330-359-5235
<http://www.wildernesscenter.org>

MEMBERSHIP APPLICATION

Membership includes invitations to all field trips, programs, the Annual Meeting, and a subscription to the quarterly journal *On The Fringe*.
Membership runs from January 1 to December 31.

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____
PHONE: (____) _____
E-MAIL: _____

(We will not sell or distribute contact information.)

I prefer to receive *On The Fringe* by ____ E-mail
____ Printed copy by US mail

Additional \$10 for Print edition of *On The Fringe*

Membership Types (circle type chosen):

Individual \$15; Family \$20;
Sustaining \$30; Patron \$50
Trillium Society \$100; Gentian Society \$200
Corporate Level \$250

Donations to the Endowment Fund to support the annual grant are always welcome.
The Annual Grant is offered for work in the field of botany or conservation that supports our mission and demonstrates excellence in research, conservation or education.

Make checks payable to:
The Native Plant Society of Northeastern Ohio
and mail to:

Jane McCullam
NPS Membership Chair
9880 Fairmount Rd.
Newbury, OH 44065-9712

The Native Plant Society of Northeastern Ohio is a 501(c)3 organization. Your donation is tax deductible to the extent allowed by law.

RENEW NOW
Don't miss an issue of
ON THE FRINGE

On The Fringe
8400 Top Rail Lane
Novelty, Ohio 44072

**DATED MAIL – DO NOT DELAY
RETURN SERVICE REQUESTED**



- Promote conservation of native plants and natural plant communities through habitat protection and other means
- Foster public knowledge and appreciation of native plants
- Support natural landscaping
- Raise awareness of the ethical issues regarding native plants
- Encourage surveys and research into native plant species and the publication of findings
- Promote cooperation with other programs and organizations concerned with the conservation of natural resources

On The Fringe

In this issue:

Letter from president of our Society and from president of ONAPA about
the urgent need to help ONAPA – Kathryn Hanratty and Guy Denny
Gott Fen Nature Preserve
Book Highlight: The Search for Lost Habitats,
Chapter 10: Orchidophilia – Perry Peskin
Folklore: Natural History of Maple Syrup – Stephen G. Saupe
Invasive Plant: Mile-A-Minute Weed, *Persicaria perfoliata* L.
Interesting Factoid: *Jeffersonia diphylla* (L.), Twinleaf
Fern in Focus: Royal Fern – Melanie Choukas-Bradley

Journal
of
The Native Plant
Society of
Northeastern
Ohio

Volume 31, No. 1

March 2013